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PLANT NUT TREES THAT BEAR

NUT TREES



J. F. JONES NURSERIES

P. O. BOX 356

LANCASTER, PA,

BUY DIRECT FROM THE GROWER

INTRODUCTORY

In 1896 the late J. F. Jones started his first fruit and nut tree nursery near Mountain Grove, Missouri. Six years later he located in Monticello, Florida, concentrating on the growing and cultivation of pecan trees. During this period some nurserymen were raising seedling pecan trees but the transplanting of these seedlings was far from satisfactory.

Mr. Jones in his experimenting found that the best results were possible only through selecting and growing the best varieties and propagating them by either grafting or budding.

In 1906 he shipped the first carload ever sold of budded pecan trees to Feriday, Louisiana for planting in a large pecan orchard. A year later he came to Feriday to supervise the cultivation of the trees he had sold the previous year.

While in Louisiana Mr. Jones became interested in northern nut tree culture through his association with the late J. G. Rush of West Willow, Penna. This resulted in his eventually coming to our present location in 1912. Since that time we have been specializing in the growing of northern nut trees.

Mr. Jones started his work with the American and European filberts in 1919 and continued hybridization work between the two strains until his death.

With the death of Mr. Jones in 1928 the management and responsibility of continuing nut tree culture has been carried on by the writer.

In the best tradition we are continuing the work started by Mr. Jones; to produce nut trees in our nursery that will with reasonable care give satisfaction, profit and pleasure to the purchaser.

The increasing growth of our business is due to the quality of our trees and the personal interest we have in the success of each purchase. This interest extends from the planting to the harvesting of the nuts.

The information we have about plants and varieties of trees today and the results we may expect from trees under various conditions has been built up on the experience of tree planters in the past. You can start today to add to the knowledge of trees by keeping a record of your plantings and by adding trees to your planting whenever you can. The experience of every tree planter is worth while. We will be glad to receive reports for our files at any time. We will also answer questions about hardiness of varieties to the best of our ability backed up by the information we have collected in the past.

The young trees planted about a home are the only things which appreciate in value. Furniture, house fixtures and the home depreciate.

Jones Trees may be found in all sections where nut trees may be expected to grow successfully—a living evidence of what cultivation of nursery stock founded on a generation of accumulated experience can accomplish.

We invite your interest in this steadily growing field.

Respectfully,

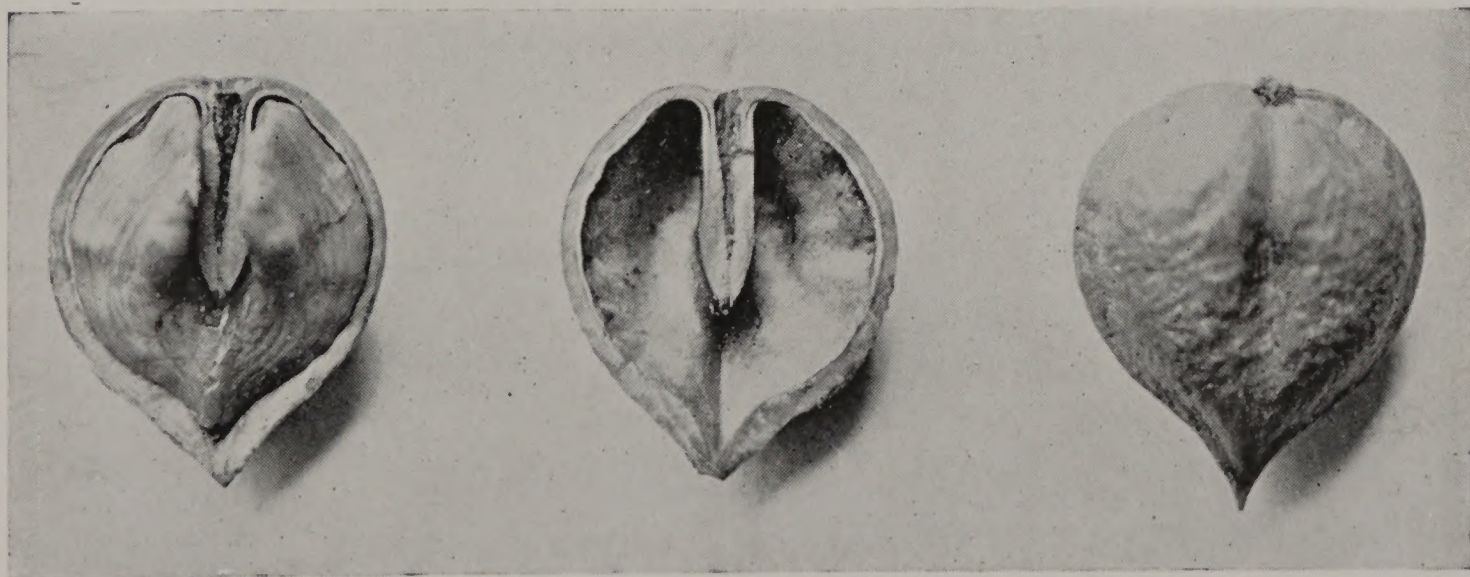
MILDRED JONES.

THE HEARTNUT, *juglans cordiformis*

This variety is rare in this country for the reason that it is a "Sport" or extreme variation of the common Japan walnut, *juglans sieboldiana*, and almost invariably reverts to that type of species from seed. Owing to the extra cracking quality of the nut, the rapid and luxuriant growth, and early and prolific bearing of the tree, the Heartnut is one of our most valuable nut bearing trees. Those looking for a nut tree that will equal the poplars, maples and willows in extreme rapid growth will want to plant the Heartnut. The tree has large, almost tropical-looking foliage. The nut is heart-shaped, smooth, brown in color and is of excellent quality having a flavor closely resembling our butternut. The nuts are borne in clusters of from five to fifteen nuts.



Heartnut bearing in nursery



Bates Heartnut

THE BLACK WALNUT, *Juglans nigra*

The picture on the cover is a grafted black walnut in a fence row planting. Plant grafted black walnuts for heavy production and finest quality nuts which crack out large kernels for fine flavor. Design your home and farm plantings for maximum crops.

The black walnut grows naturally from Canada to Florida and from Maine to the Great Divide, and on about all kinds of soils and locations. The climate of Colorado is especially trying on trees, but the black walnut is doing well there.

The black walnut is one of our principle forest trees in the U. S. and will thrive with little or no attention as do other trees of the same type. When planting the trees for nut production they should be given plenty of room and they naturally respond the best to proper care and attention. We heartily recommend planting this tree. The varieties we are growing are thin shelled, easily cracked and are of excellent flavor.



Thomas



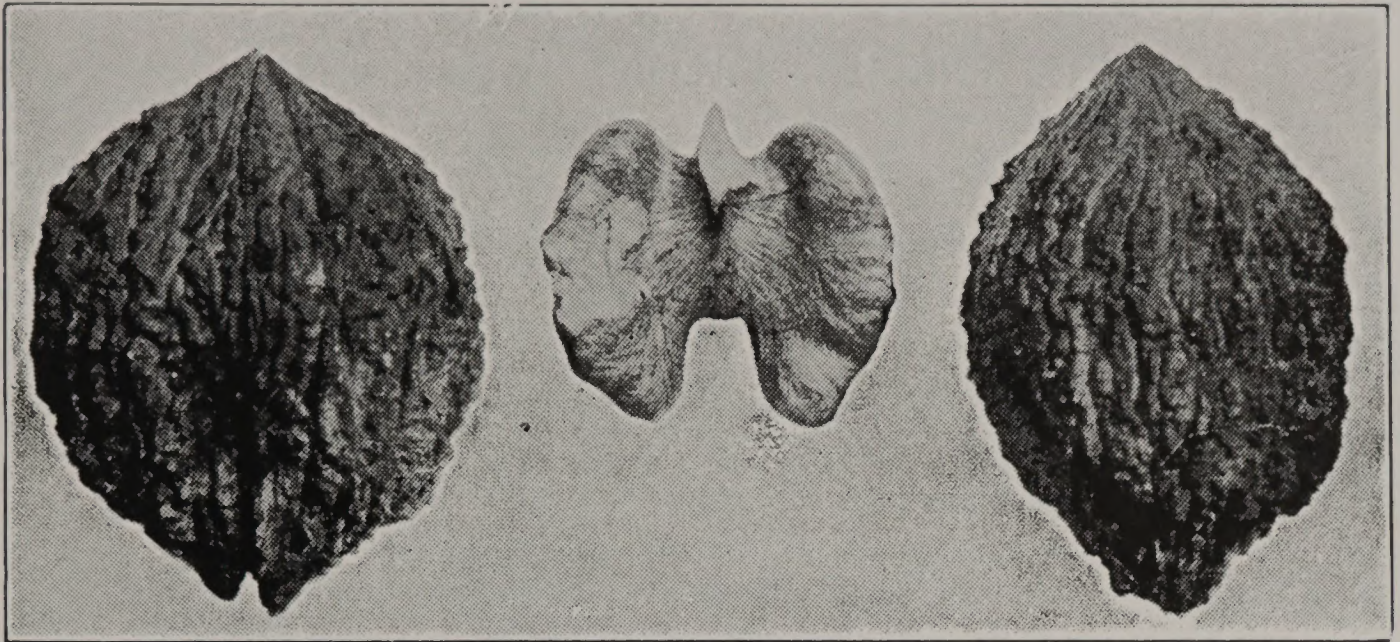
Stabler

THOMAS. Originated with the late Jos. Thomas, King-of-Prussia, Pa. One of the finest black walnuts yet found. Nut large, kernels large, light colored and of very good quality. The tree is a fast grower and adapts itself to a wide range of soils and climates.

STABLER. Originated in Maryland. One of the finest black walnuts and the best of all in cracking quality. The kernels can easily be removed in halves and this variety runs quite a few one-lobed nuts which fall from the shell in one piece. Slow growing. Kernel medium to dark in color, sweet and mealy.

TEN EYCK. Originated at So. Plainfield, N. J. The nut is medium to large and has a very thin shell. The kernel is full and plump and of fine quality. The tree is a good upright grower and bears heavily here.

ELMER MEYERS. This is a new variety. Nut very thin shelled and excellent cracker. Kernel medium in color, for test planters only. Tree blossoms late about with W. Mayette English Walnut.



Ohio Black Walnut

OHIO. This variety is from Northern Ohio. The tree makes the most symmetrical and upright tree of the lot. The nut is medium to large, shell thin, kernel full, light of color and of the best quality. The earliest bearing tree in our nursery.



Thomas Walnut

THE ENGLISH WALNUT (*juglans regia*)

Our trees are budded or grafted on the native black walnut root stock. Trees propagated this way seem to ripen up their wood growth earlier in the fall and are thus hardier. While the English walnut can be grown with more or less success in the eastern, middle and southern states our opinion is that its cultural range will follow that of the sweet cherry. Given good care the trees bear early. Trees require a neutral to alkaline soil.

WILTZ MAYETTE.

An extra fine diamond brand quality nut and fortunately a very hardy and reliable tree. Because it vegetates late it is less apt to be injured by frost than other English walnuts. The shell is thin, nut smooth and kernel large, light colored and of fine flavor.

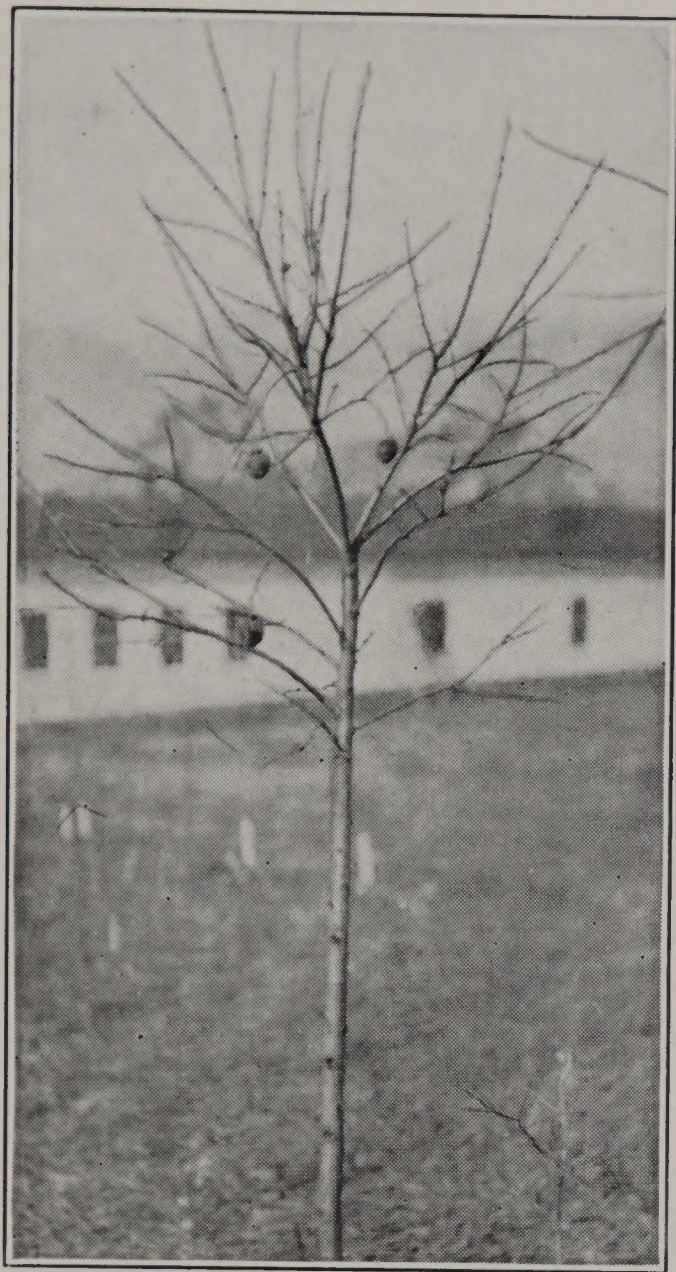
ALPINE. The original tree stood in Lancaster. Shell slightly rough. Doing fine here in bearing and hardiness of tree. Blossoms with black walnuts.

PAYNE. This is an excellent variety. Blossoms about with Alpine. Nut about size of Mayette.



3 Year English Walnut In Our Nursery

NATIVE PERSIMMON, *diospyros virginiana*



Lambert Persimmon

This is the native persimmon and has the delicate but distinct flavor of the persimmon and not the flavor of the oriental. The persimmon will succeed on a wide range of soils and well up into the Northern States. Glossy green foliage. Very ornamental.

LAMBERT. This is the largest persimmon we are growing. The fruit measures from 1¼ to 1½ inches across and 1½ to 2 inches long. Ripens from mid season to late.

EARLY GOLDEN. This is a medium to large round type of fruit and of very fine flavor. Fruit ripens early, about latter part of September here.

JOSEPHINE. This is a small fruited seedless type of very fine flavor. Ripens about mid-season.

SUPPLY OF TREES

The demand for certain varieties of trees is something we cannot control or anticipate. We try always to have a good supply of trees on hand, but we often sell out of varieties early and have to return late orders. We ask your patience if this should happen to your order. Sometimes we book orders

for a year ahead and when this is done we return the money sent for the customer to hold until time for shipment of the order. We do not want to hold money over the summer for any unfilled orders unless it is the wish of the customer.

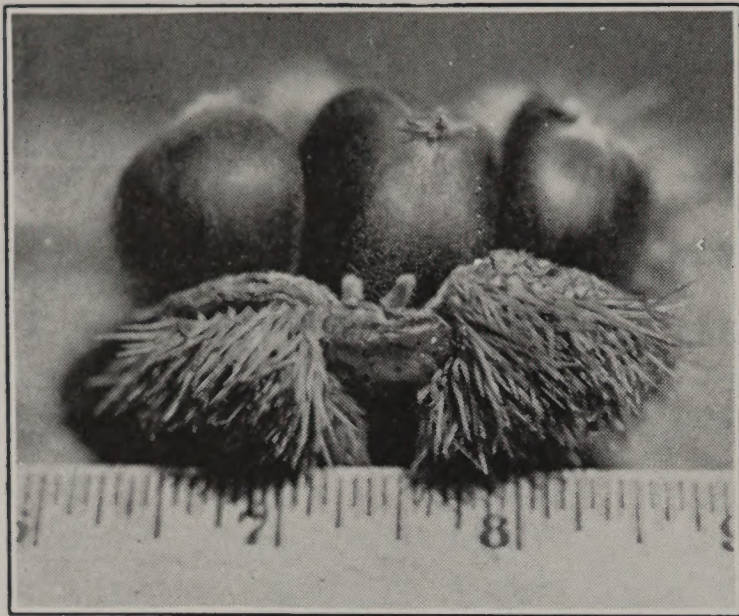
IMPROVED ROOT SYSTEMS

Although conditions here are very favorable for both root and top development, we greatly improve the root system by an improved method of transplanting the young trees. Such trees have more compact and larger root systems. Transplantings add considerably to the cost of the trees but this is necessary if the trees are to be transplanted successfully by the purchaser later on.

BLIGHT RESISTANT CHESTNUT

CHINESE CHESTNUT, *castanea molissima*—This strain was introduced by the U. S. Department of Agriculture in its search for blight resistant species, and is the best of the chestnuts so introduced. The nuts are larger than those of the American chestnut and are equally sweet and good. This species does well on a wide range of soils but does not do so well on low poorly drained soil.

GENERAL REQUIREMENTS OF NUT TREES



Blight Resistant Chestnuts



The Chinese Chestnut holds its dried and brown leaves during the winter.

Nut trees should be ranked in a class with other food producing trees. This will give the prospective planter a better picture of the needs of the tree. For home planting one need not be as exacting about each factor which is good or bad for a tree because generally for the home the nut tree is filling a place as a shade tree on the lawn and every nut picked from the tree is just so much more food value than the ordinary shade tree will produce. For this reason a late killing frost due to lack of sufficient air drainage will not be a serious draw-back because generally severe frosts do not occur late enough to injure the nut tree group—they vegetate late. For the farm owner who is making every piece of land pay a dividend the nut trees are exceptionally fine. They can be used along fertile fence rows, lanes, in the pastures, on the lawn and on hilly ground where the soil is rich enough to grow the trees as well as in the wood-lot. The nut trees have few pests compared to the fruit tree group. Most of the species we are growing are primarily forest trees. The prospective orchard man will want to pay particular attention to good air drainage, good soil drainage, rich soil, preferably with a good clay subsoil to hold fertility. No hard pan sub soil or trees planted on ridges of rock. They grow for a time, but as the roots cannot penetrate down will die in a few years. Usually land which will support other large growing trees is ideal for nut tree planting. Most

of the nut trees listed in our price list will do well on either acid or alkaline soil except the English walnuts. These require a decidedly alkaline soil. The chestnuts require a neutral to acid soil.

THE NORTHERN PECAN



Fruiting Branch of the Pecan

ville and Vincennes, Indiana, two points within the heart of the native pecan belt of the North are 135.7 and 180.8 respectively. These units are calculated by a method evolved by the late W. G. Bixby of Long Island by adding together the average number of degrees above 50 for each month as shown by weather records. For example, if the average for April is 55 degrees, by this system there would be 5 heat units to be credited to the period for the locality. If the average for May should be 67 degrees, the credit for the month would be 17 units or a total of 22 for the two months. Continuing through to the end of October, the total should not be less than 105 degrees if pecan nuts are to be expected to mature in any given locality where northern varieties are contemplated. One of our pecan trees is growing beautifully at Fair Haven, Vermont. The owner is proud of the tree because of its singular beauty. The tree is about twenty years old.

The northern pecans are as hardy as the other hickories and in this regard should not be confused with the southern pecan. The pecan grows naturally from Terra Haute, Ind., and Clinton, Iowa on the north to the Gulf Coast on the south. The trees grow naturally in river over-flow lands, but during the growing season have good soil drainage. They adapt themselves to a wide range of soils, and grow well several hundred miles north of latitudes at which nut crops are significant. It is well worth planting as an interesting ornamental wherever conditions are at all favorable. Crops of nuts are largely dependent upon the length of the growing period and the amount of heat that occurs during that period. For the northern pecan this is roughly about 170 days, beginning about May first and continuing until the middle of October.

The heat units of Evans-

THE NORTHERN PECAN—(Continued)

BUSSEY. Supposed to be the parent of the Indiana pecan as the nuts are much alike as to size, shape and quality. The trees are growing not far apart. The Bussey is much the older and larger of the two trees. The old Bussey tree is said to be the greatest bearer of any of the pecan trees in the state of Indiana.

GREENRIVER. Originated in Henderson County, Ky. The nut is medium size, shell thin; kernel full and plump and of the best quality. This variety bears good crops here.

POSEY. From Gibson County, Indiana. One of the largest and finest pecans of this group. The nut is large and a real paper-shell. The cracking quality is the very best. The tree has very large foliage and is very ornamental.

INDIANA. From Knox County, Ind. One of the largest of the Indiana pecans and one of the best. The nut is thin shelled, full meated and of very good quality. The tree is a very heavy bearer.



DISTANCE FOR PLANTING

Pecans and black walnuts 50 to 70 ft. apart; English walnuts and chestnuts 40 to 50 ft.; filberts 15 to 20 ft.; hickories 40 to 60 ft.

NUMBER OF TREES TO THE ACRE

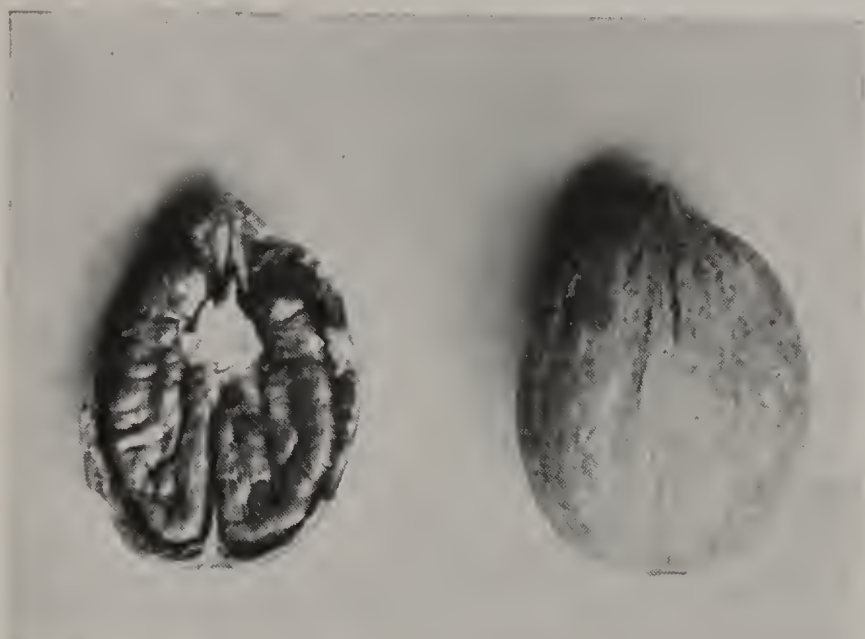
15 ft. apart each way 205 trees; 20 ft., 110 trees; 40 ft. apart 28 trees; 50 ft., 17 trees; 60 ft., 12 trees; 70 ft., 9 trees.

THE HICANS

These trees are a natural cross between the pecans and species of the hickory. The varieties we are offering to the trade we consider the best varieties to be had of this species.

BURLINGTON (Marquardt). This variety is known under both names. The tree was named after Judge Marquardt of Burlington, Iowa. The tree is a very rapid grower and very ornamental. It will succeed under neglect where most trees would fail. The nut, which is large and long, resembles the pecan more closely and is a good cracker. We can recommend this variety very highly for general planting.





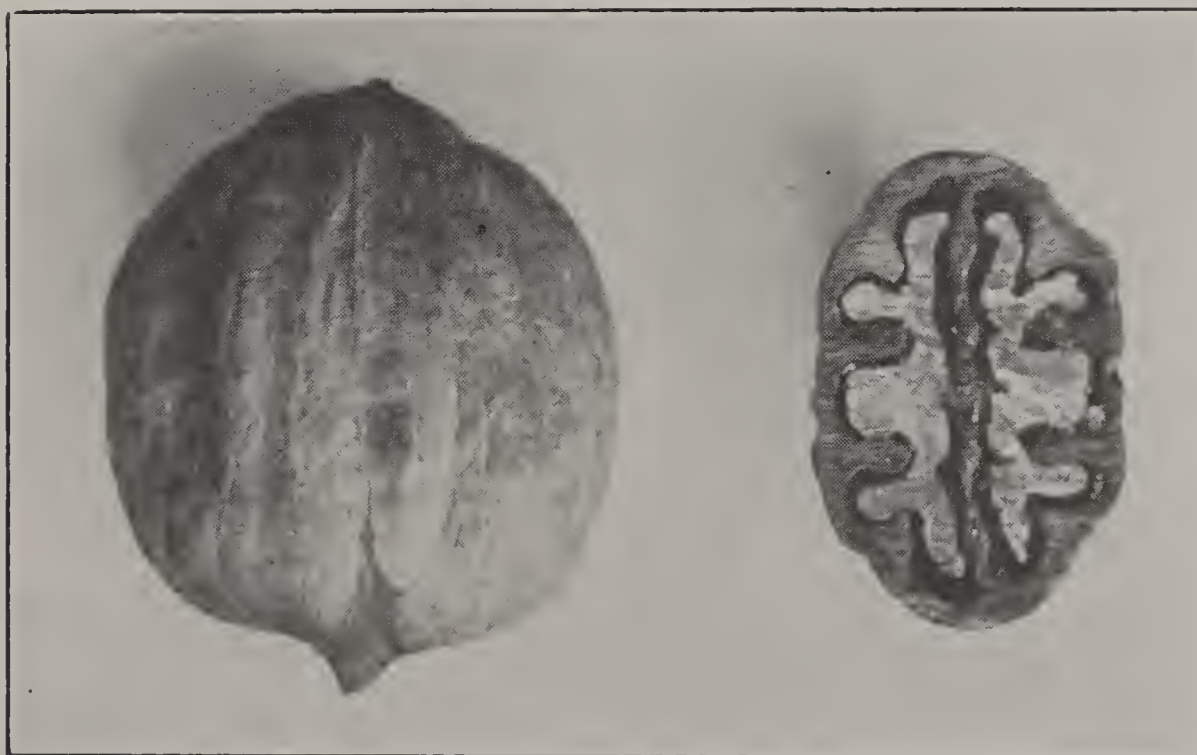
PLEAS. A pecan-bitternut hybrid. The tree is perfectly hardy, has a fine glossy foliage and is very ornamental. The nuts have the thinnest shell of any in this group and can be cracked by crushing two nuts together in the palm of the hand.

OUR METHOD OF PACKING is superior to that generally used in packing nursery stock and insures the delivery of trees in good condition to distant points. We

have received many complimentary letters on the condition of the trees on arrival.

THE HICKORIES

FAIRBANKS. From east central Iowa. One of the best of the hybrid group. The bitternut hickory, one of the parents, is the most widely distributed of all our hickories. It is found growing naturally from the St. Lawrence River on the north, to Florida on the South, and westward to Northeastern Nebraska, Oklahoma and Texas. The pure shagbark one of the parent trees of this hybrid is strictly a northern species and does not grow very far south except along the mountain ranges. This hybrid should succeed well into the Cotton Belt at least, if not to the Gulf Coast. The Fairbanks has retained the fast growing and early bearing habit of the bitternut, and the good flavor of the shagbark.



STANLEY SHELLBARK

This is the big bottom shellbark or king nut. Originated near Carthage, Ind. The tree bears well and the large nuts crack better than any other of this class so far tested. The kernel is full and of very good quality.

FILBERT AND HAZEL BUSHES

These plants are quite hardy and will succeed anywhere the English Walnut will or possibly farther north. The principal commercial planting of the filbert to date has been in Oregon and Washington. These plants are doing very well here in our nursery and the small plants we ship out usually have a nice sprinkling of nuts on. For those who want quick returns and plants that do not take up as much room as the larger growing trees it is well worth considering this species



Aveline

Barcelona

DuChilly

of the nut bearing trees. The filberts also make an excellent screen hedge when planted 6 ft. apart in the row. The filberts will bear but a few nuts when planted alone. Plant more than one variety for cross pollination purposes. We have selected just a few of the best varieties of filberts which can be counted upon to bear the finest nuts.

BARCELONA. This is the leading commercial sort being planted in Oregon and Washington where it bears very large crops. Although it blooms early here, Barcelona is one of the best croppers we have. It blooms over a long period and needs two or three pollinators for the best results.

WHITE AVELINE. This variety has so many good points it should be in all collections. Nut medium size, fair bearer. Quality excellent. Fine pollinizer.

Du CHILLY. Tree more upright in growth. Nut large and long. Excellent quality and good bearer.

DAVIANA. Nut medium to large, roundish oblong, excellent quality. One of the best pollinizers for Barcelona.

ITALIAN RED. This is another tall slender growing plant. Nuts more the shape of DuChilly and very attractive.

PURPLE LEAF. This is a variety bearing a small to medium sized nut, but being planted for its ornamental effect. In the early growing season the leaves are a deep purple shade.

JONES HYBRID. This new strain of filbert combines the hardiness of the American hazel with the reliable fruiting quality of the European filbert. Nuts are as large as the largest European varieties we are growing. We are propagating bushes only of the best sorts.



Filberts In Husks

CIONWOOD

We can supply either buds or grafts of our fine varieties of nut trees to customers interested in top-working seedling trees. Buds at 5c each or \$4.00 per hundred. Grafts at 6c each or \$5.00 per hundred prepaid. No orders accepted for less than 50c on account of cost of assembling, packing and prepaying shipping charges.

T Y I N G MATERIALS. Waxed muslin for tying buds, $\frac{1}{2}$ yd. 40c; 1 yd. 75c. This material is 36" wide. Raffia, $\frac{1}{4}$ lb. 20c; $\frac{1}{2}$ lb. 35c; 1 lb. 60c, postpaid. Our own preparation of grafting wax which must be applied hot 50c per lb. Booklet on budding and grafting trees 10c.

VALUE OF NUTS IN THE DIET

Nuts are gaining in importance each year as a staple in the diet of many people because we are becoming more conscious of the mineral values of foods. Nuts are ready

to eat as they come from the shell and cannot be improved upon by methods of cooking. I believe as time marches on that nuts will become more important in the diet and will eventually replace some of the proteins we are now using largely. Without doubt nuts are small, tightly sealed packages containing highly concentrated pellets of mineral nutrition direct from Mother Earth. Dr. John Harvey Kellogg of Battle Creek, Michigan in an article in the seventh annual report of the N. N. G. A. wrote as follows: "In nutritive value the nut far exceeds all other food substances; for example the average number of food units per pound furnished by half a dozen of the more common varieties of nuts is 3231 calories, while the average of the same number of varieties of cereals is 1654 calories, half the value of nuts. The average food value of the best vegetables is 300 calories per pound and of the best fresh fruits grown in this country is 278 calories. The average food value of the six principal flesh foods is 810 calories per pound, or one-fourth that of nuts."

YIELDS AND PROFIT

We are often asked how much certain trees will bear in a given time and the amount in money a person can realize for the crop. No one can tell what any certain tree or trees will bear at a given age, because conditions are too varied, but we can estimate the crop in a general way. Good budded or grafted trees of good bearing varieties of nut trees when properly planted and cared for until the trees are well established will begin bearing about as early as the apple and should produce profitable crops as soon as the trees are large enough to carry good crops of nuts. On rich land this should be about as early as the apple.

It is conservatively estimated that if one plant 1000 good grafted trees of the black walnut and give the trees proper care until established they will return a net profit of \$3,000. at 10 to 12 years of age. If the nuts are cracked and the kernels marketed the income should be considerably larger than this. The nuts may be sold as they come from the trees or they may be cracked and the kernels sold at one's leisure, during the fall and winter months. Every year sees a large increase in the quantity of nuts cracked and eventually they will be sold that way almost entirely. The average person will not eat very many nuts if they have to crack them but if they are cracked and put on the market in a readily usable form the demand will be practically unlimited. Remarkably efficient power crackers have been invented and are now in use cracking pecans. It is believed that just as good ones will be devised for cracking good black walnuts as soon as we have them in sufficient quantity to justify the manufacture of such machines. Eventually nut crackeries will be in operation all over the country and those having a few hundred pounds of nuts or those who prefer to sell their product as they come from the trees can dispose of their product readily and without the trouble of bagging and shipping them.

Some people in investigating the possibilities in growing nuts compare production and sales per acre with those of the best apple or peach orchards. Unless one knows the trouble and expense a fruit grower has in his fight with insects and disease the comparison is not a fair one. It is not what a crop sells for that determines the profit or the satisfaction of growing. With half the gross sales per acre a nut orchard might show more net profit and the crop is certainly more satisfactory to handle. Nut trees require comparatively little care or attention and are permanent, outliving several generations of fruit trees. When fruit is low in price the fruit grower must go ahead with the necessary spraying, pruning, cultivation and thinning of the fruit, even though returns do not justify the expense, because if left to shift for themselves, fruit orchards are soon gone and the investment is lost.

At the present time black walnuts of the grafted varieties are selling from \$4.00 to \$8.00 per bushel. Kernels 80c to \$1. per lb. The grafted walnuts average 10 lbs. of kernels to a bushel of nuts. The present market is retail due to the small amount of nuts to be had as yet from commercial orchards.

WHEN TO PLANT

Our hardy Pennsylvania grown trees may be planted successfully in the fall, winter or early spring, depending on where the planting is to be made. North of Pennsylvania it is usually best to plant in the early spring except in favored sections where the climate is comparable to our own. In climates like our own the trees can be planted during the fall or spring months. Winter is the time for planting in the south. Southern orders should be received not later than December first, because after that time our digging conditions are very uncertain. If we have the order on hand we can dig the trees and plant them indoors before our ground freezes too deep to work. We prefer to dig each order as near to the time of shipment as possible. We have facilities here to keep several carloads of trees in excellent condition until they are shipped, but we use this storage for nut trees only in the preparation and handling of the order.

PLANTING AND CARE OF TREES

If possible, plant the trees at once upon arrival; otherwise, heel them in (temporarily plant them) so the roots will not dry out.

IN PLANTING, the holes should be dug wide enough to accommodate the roots and a few inches deeper than the length of the roots. No manure or other coarse material should be used in the holes about the roots. A few handfuls of bone meal or tankage mixed with the soil about the roots will give good results. Only good top soil should be used in filling the holes and this must be firmed well about the roots while the tree is being planted by tamping with a tamping stick which has a smooth round end that will allow the earth to be firmly packed and at the same time not bruise the roots. Most failures in transplanting are due to the planter not tamping the earth well about the roots of the tree or from using water in the holes as the trees are being planted. If water is used and soil handled while wet, it will harden and shrink away from the roots in drying. For the same reason trees should never be planted soon after a heavy rain or at any time when the ground is very wet, unless the soil is of a sandy type which does not become as paste if worked in while wet.

If the ground is dry, so much the better for planting. The trees may be watered after they are planted. Remove a shovel of earth on two sides of the tree and a foot or more away; fill this depression with water and after this has

soaked in, put the dirt back, leaving a loose mulch of soil on top. If the clay is thrown out from the holes and only top soil used in filling the holes—taking this top soil from a circle surrounding the tree when the tree is planted it will be surrounded by a depression or basin a few inches below the surface level. This is a decided advantage.

Trees planted in this way not only live better but grow much faster as the basin about the tree gathers both moisture and fertility during rains and is eventually filled up with the most fertile soil. This method of planting is especially desirable where trees are to be grown without cultivation. It is possible by this method of planting, supplemented with an annual mulch, to grow vigorous trees and profitable orchards easily and cheaply on rough, cheap land, that would be quickly ruined by erosion if cultivated. By sowing sweet clover or other strong growing legumes and rotating with orchard grass crops plenty of mulching material can be grown right where it is needed and at the same time the land will be built up and improved. Keep the mulch about 4 inches away from the tree trunk.

TRIMMING NUT TREES. In transplanting the trees they should have the tops reduced according to size. A tree one or two years from the graft should be trimmed back about a third of the preceding season's growth. On older trees cut out undesirable limbs and cut back the preceding season's growth two-thirds. This is done to balance the many hair roots which are lost in digging the tree. The trimming of trees when transplanting is usually practiced with all deciduous trees when transplanting them except where expensive methods of moving them with earth are employed. Many people prefer to keep the present top on a tree. In this case, the tree is usually lost. The top which is reduced in the spring at transplanting time will be regained with its next season's growth. It is always good to leave plenty of leaves on the tree because they are part of the tree's natural function of respiration. Do not attempt to cut off any new growth of the tree until the end of the second growing season. If a side shoot on the trunk of the tree above the graft is growing too fast it is better to pinch the head out of the shoot and allow the few leaves to help shade the trunk of the tree for the first year or two. Allowing the tree to shade itself in this manner is far more important than any preparation we have yet tried. The next best method of shading the trunk of a tree during hot weather is used only on three year trees, or older, by merely wrapping the trunk of the tree with heavy paper or burlap. This should be removed after danger of sun scalding is over in the fall.

Shaping and trimming a tree is, after its second growing season, a matter of good judgment. Almost every one can tell a nicely shaped tree from a poorly shaped specimen and for that reason with thought upon the subject most

people know which limbs to cut off and to let on a tree for a good specimen. The tree can be trained each year if necessary. When cutting limbs or branches off make a clean cut close to the tree so it will heal over in as short time as possible. Dead and decaying stubs in a tree are harmful in appearance and to the long life of a tree. A tree is a living thing not endowed with the ability of choosing the place where it will grow and keep itself well groomed. Trees have helped conserve and build up the soils we have today. Let us treat them kindly and give them the care we can.

FERTILIZERS

We cannot determine to the exact pound the fertilizer requirements of trees because soils vary so much, both in composition and the ability to retain fertility. Your soil must have certain physical properties before the addition of commercial fertilizer is worthwhile. The most important of these are temperature, moisture and proper aeration of the soil. Root growth will take place at about 40° temperature minimum and continuing through the summer as long as sufficient moisture remains in the ground. During hot, dry seasons the trees stop growth. The addition of humus to the soil in the form of green cover crops, manure, or peat is very beneficial because the straw or perhaps peat in the soil holds moisture while it is decomposing. The bacteria which works in the decomposition of this material is making available plant food during the entire growing season as long as a certain degree of moisture is maintained so the bacteria can work. Because decomposition of humus in the soil is adding plant food during the growing season it is not possible by a soil test to tell exactly how much chemical fertilizer your trees may require. However, if your trees are not performing as you think they should a soil test may detect a deficiency in your soil which may be easily remedied.

Another point for consideration. The various elements in commercial fertilizers do not take the same length of time to penetrate to the same depth of soil. Nitrogen penetrates quickly. Phosphorus about an inch of soil a year and Potash about two inches a year on an average. Again penetration depends on soil composition. From this you can readily see it is important to apply the fertilizer at the approximate place where the roots of the tree are and where it can be used readily. The punch bar method of fertilizing trees which have become established several years is best. Holes should be punched about every square foot over the root feeding surface, which is generally ground surface to equal the spread of a tree. Regular commercial fertilizers in about a 6-8-4 analysis can be used, about one pound to each inch of caliper of tree. Application time either about October or March first in our section as well as other places comparable to the climate of south-eastern Pennsylvania. Organic fertilizers which require decomposition such as bone-meal and cotton seed meal should be applied late fall to receive benefit for the following

summers growth. As a general rule about one lb. of fertilizer to each inch of caliper of the tree should be sufficient. If your soil conditions are such that you require special and specific information your County Agent may be able to help you or we shall be glad to answer further questions by mail. Calcium or lime can be added to soils for best walnut production where the soils are decidedly on the acid side. As overdoses of lime will throw other chemicals out of balance in the soil it is best to keep the balance of acidity and alkalinity as near to neutral as possible unless the tree or crop requires a decidedly acid or alkaline condition. Moderation in the addition of the various chemical elements to your soil should be the practice unless, as stated before, you are definitely sure of a deficiency of certain elements.

GUARANTEE



We guarantee all trees sent out to be of the size and quality specified, but we cannot possibly guarantee positive results with our trees after they leave our hands. If we would guarantee to replace trees that did not grow for some reason or other the trees would generally be neglected for this very reason. The prices of the trees would have to be advanced to take care of this loss of careless planting and neglect. We are careful to see that all trees sent out are well grown, true to label and in condition to grow, but since we have no influence over conditions surrounding the trees or over their planting and care after they leave our hands, we cannot assume responsibility for any losses resulting from failure to make the trees grow for any reason. If customers receive trees from us which are not satisfactory in every way they should advise us **at once**; we can then make a satisfactory adjustment.

REFERENCES. Lancaster County National Bank, Lancaster, Pa.; Dunn & Bradstreets.

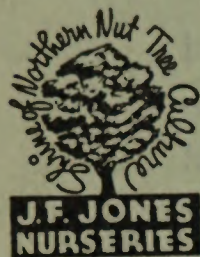
MEMBERSHIPS. Northern Nut Growers Ass'n.; Penna. Nut Growers Ass'n.; American Ass'n. of Nurserymen; Penna. Nurserymen's Ass'n.; Penna. Forestry Ass'n.

TERMS

Our business is strictly cash. You may pay any amount you want on early orders and send the balance due on order just before you want us to make shipment of your order. For C. O. D. orders send 25 per cent cash with order and balance will be shipped collect.

Date.....

LANCASTER, PA.



Ship by

(State how you wish your order shipped, otherwise we will ship as we deem best)

Name

(Prefix Mr., Mrs. or Miss and write plain)

Street or R. D. Town

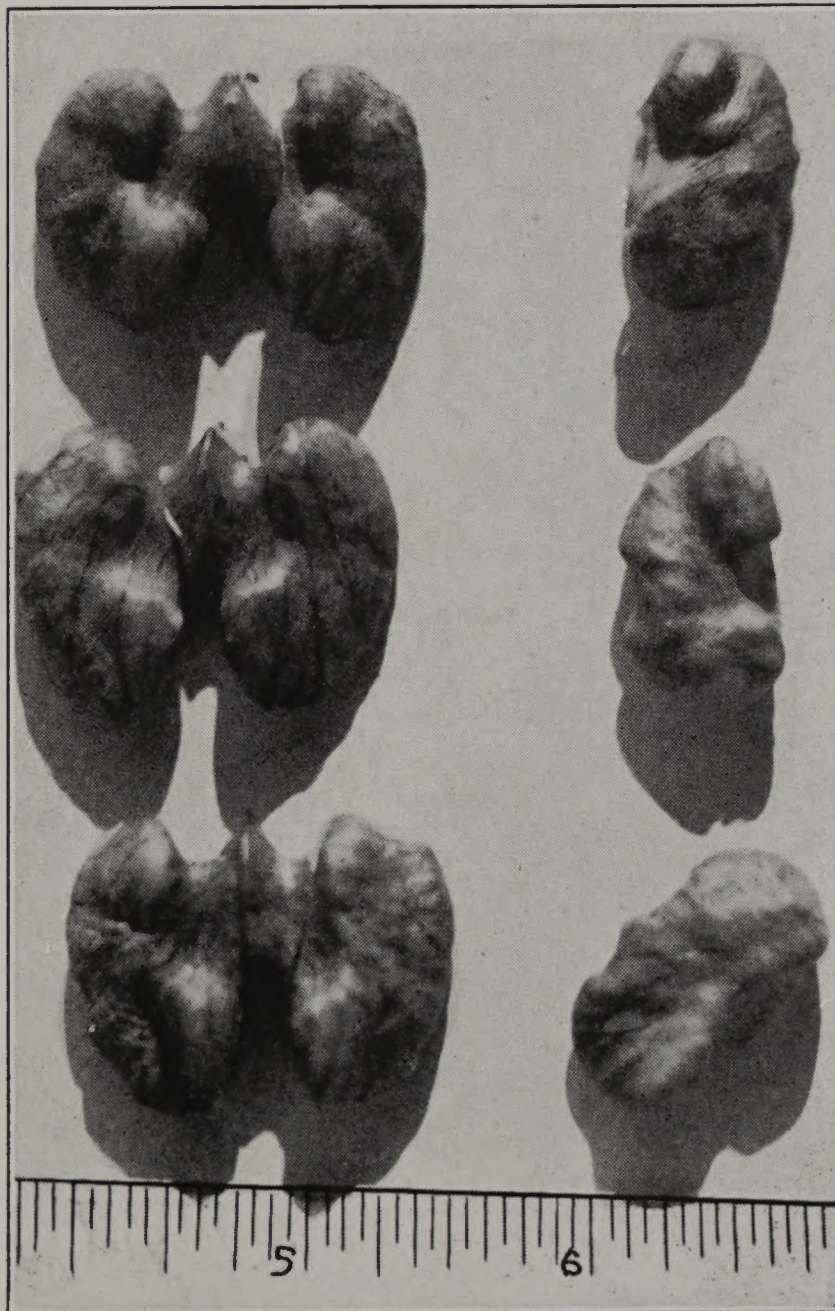
Express Office County State

If out of variety ordered shall we substitute nearest variety of equal value?or return money?

[illegible]

Every shipment f. o. b. Lancaster, Penna.

PARCEL POST shipments are packed light, yet well protected from drying out by re-inforced, air-tight paper, and small shipments up to 300 miles can usually be sent cheaper in this way than by express. We cannot send larger than 2 to 3 ft. trees by parcel post unless we trim the 3 to 4 ft. size ready for planting. The postage on parcel post shipments is charged for when shipment is made where it is not sent with the order. All larger trees are sent railway express, motor express or freight according to the wish of the purchaser.



Kernels of the Thomas black walnut

ARE GRAFTED NUT TREES APPRECIATED?

It is only in recent years that people in the northern states have awakened to the advantages offered in grafted nut trees. Now, with thousands of grafted trees bearing generally over the country with proof of their superiority, the decreasing demand for seedlings will soon discourage the cultivation of these seedling trees and they will be discontinued, just as happened with the pecan in the south and the English walnut in the west—when only a few years ago only seedling trees were advocated and planted.

Being familiar with the industry as the first extensive propagator of these trees, both north and south, the late J. F. Jones was largely responsible for the rapid development of the pecan and black walnut in large budded or grafted orchards.

Even after grafted or budded trees were available in quantity many people planted seedling trees after extravagant claims from seedling nurserymen as they fought for defense of their trade. For these seedlings, costing so little to propagate in comparison with the grafted or budded stock, were then a very profitable business.



VISIT OUR NURSERY

Visit us and see for yourself how well we take care of our trees and the amount of care and attention it is necessary to give them. We are located about four miles south of Lancaster on State route 222. Coming through Lancaster to our nursery go south on South Prince Street which leads directly out to route 222.